

Customer No. 27061  
Confirmation No. 8236

Patent  
Attorney Docket No. GEMS8081.041

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : Brinsfield et al.  
Serial No. : 09/689,374  
Filed : October 12, 2000  
For : MOBILE CLINICAL INFORMATION SYSTEM  
Group Art No. : 3626  
Examiner : Porter, Rachel L.

---

**CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10**

I hereby certify that, on the date shown below, this correspondence is being:

**Mailing**

- ☐ deposited with the US Postal Service in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

**37 CFR 1.8(a)**

**37 CFR 1.10**

- ☐ with sufficient postage as first class mail      ☐ As "Express Mail Post Office to Addressee" Mailing Label No.

**Transmission**

- ☐ transmitted by facsimile to Fax No.: 571-273-8300 addressed to Examiner Porter, Rachel L., at the Patent and Trademark Office.  
☒ transmitted by EFS-WEB addressed to Examiner Porter, Rachel L., at the Patent and Trademark Office.

Date: November 1, 2006

/Robyn L. Templin/  
Signature

---

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF PURSUANT TO 37 C.F.R. §§1.191 AND 1.192**

Dear Sir:

This Appeal Brief is being filed in furtherance to the Notice of Appeal electronically filed to the Board of Patent Appeals on September 1, 2006.

1. **REAL PARTY IN INTEREST**

The real party in interest is GE Medical Systems Information Technologies, Inc., an Assignee of the above-referenced application by virtue of the Assignment to GE Medical Systems Information Technologies, Inc., a wholly-owned subsidiary of General Electric Company, recorded on December 18, 2000, at reel 011405, frame 0941.

2. **RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal. GE Medical Systems Information Technologies, Inc. will be directly affected by the Board's decision in the pending appeal.

3. **STATUS OF THE CLAIMS**

Claims 1-31 are currently pending and under final rejection and, thus, are the subject of this appeal.

4. **STATUS OF AMENDMENTS**

In response to the Final Office Action mailed June 1, 2006, Appellant filed, on July 31, 2006, an amendment to the claims correcting a typographical error in claim 1 and incorporating the subject matter of claim 29 into claim 26. In the Advisory Action mailed August 15, 2006, the Examiner indicated that the proposed amendments filed after final rejection would not be entered because they raise new issues that would require further consideration and/or search and that they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal. The Examiner went on to further claim that the amendment to claim 26 "alters the scope of the claims." Advisory Action, Aug. 15, 2006, pg. 3.

Merely incorporating the subject matter of a dependent claim does not raise a new issue that would require further consideration and/or search unless the Examiner did not properly search and examine the dependent claims in the first instance. If that is the case, then the Examiner must reopen prosecution and do so.

On August 21, 2006, Appellant filed a petition under 37 CFR §1.181 seeking supervisory review of the Examiner's refusal to enter the proposed amendments presented in Appellant's amendments filed on July 31, 2006. However, as of November 1, 2006, Appellant has not received any decision on the petition, and PAIR fails to identify any.

As such, the claims pending at the time of filing the Final Office Action of June 1, 2006 are presented and discussed below.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is related to "clinical information systems and more specifically, to a two-way, wireless clinical patient information monitoring system and a portable patient monitor." *Application*, pg. 1.

Claim 1: A wireless, bi-directional, portable patient monitoring device (56) for integration with patient monitoring systems interfaces to receive, process, display, and allow for changes in patient care parameters (64) is disclosed. A communication interface (92) is included and has a wireless local area network (WLAN) input (94) to receive patient data (64) from a WLAN within a medical care facility (39) and a WLAN output (94) to transmit care parameters (64) as needed to the WLAN. *Application*, pg. 3. A processor (70) is connected to the communication interface (92) to process the patient data (64) and the care parameters (64). *Id.* Furthermore, a display (88) is connected to the processor (70) to display the processed patient data (64) in human discernable form and an input device (86) is connected to the processor (70) to allow a change in the care parameters (64) by a health care provider (58). *Id.*

Claim 18: Additionally, a mobile clinical information management system (42) to decentralize patient monitoring includes a portable patient monitor (56) having a processor (70) connected to a communication interface (92) to receive and process patient data (48) and to process and transmit care parameters (64). *Id.*, pg. 11. The system also includes a display (88) to display the patient data (48) and an input device (86) to change (134) the patient care parameters (64). *Id.*, pg. 11. The portable patient monitor (56) has a configuration to allow wireless transport on a health care provider (58) for extended

periods. *Id.*, pgs. 13-14. The system (42) further includes a plurality of bedside patient monitors (53, 69) to connect to a plurality of patients (62) and transmit patient data (48) as well as a WLAN coupled to the plurality of bedside patient monitors (53, 69) and the portable patient monitor (56). *Id.*, pg. 8.

Claim 26: Furthermore, a computer program (100) residing in memory (74) of a portable patient monitor (56) is configured to cause a processor (70) carry out a plurality of steps. In particular, the processor (70) is caused to remotely interface (92) to a WLAN to acquire any patient alarms (120) and sound an alarm (124) if a patient alarm occurs (122). *Id.*, pg. 13. Additionally, the processor is caused to allow user silencing (126) of the alarm at the portable patient monitor (56) and at a bedside monitor (53, 69) and display patient data (48). *Id.*

6. **GROUND OF REJECTION**

The grounds of rejection are presented and argued below in the order in which the claim rejections appear in the Final Office Action mailed June 1, 2006:

Whether claims 1, 14, and 18 are unpatentable under 35 U.S.C. §103(a) over Maschke et al. in view of Jacobsen et al.

Whether claim 8 is unpatentable under 35 U.S.C. §103(a) over Maschke et al. and Jacobsen et al., and in further view of Fuchs et al.

Whether claim 10 is unpatentable under 35 U.S.C. §103(a) over Maschke et al. and Jacobsen et al., in further view of and Ballantyne et al. and in further view of Gallant et al.

Whether claim 29 is unpatentable under 35 U.S.C. §103(a) over Maschke et al. and Jacobsen et al., and in further view of Fuchs et al.

7. **ARGUMENT**

**REJECTION OF CLAIMS 1-7, 9, 12, 14, and 18-22 UNDER 35 U.S.C. §103(a)**

The Examiner rejected claims 1-7, 9, 12, 14, and 18-22 under 35 U.S.C. §103(a) as being unpatentable over Maschke et al. (USPN 6,221,012) in view of Jacobsen et al. (USPN 6,160,478). *Final Office Action*, 06/01/2006, pg. 2.

**Claim 1:**

Claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Maschke et al. in view of Jacobsen et al. The Examiner concluded that “Maschke et al. teaches a wireless bi-directional portable patient monitor” having that called for in claim 1. *Id.* In particular, the Examiner stated that Maschke et al. teaches “a communications interface having a local area network input to receive patient data from a wireless communications network within a medical care facility and an output transmit care parameters as need to the wireless communications network” and “an input device connected to the processor to allow a change in the care parameters by a health care provider.” *Id.*, pgs. 2-3.

Because Maschke et al. “does not expressly disclose that the data is transmitted to/from a wireless LAN,” the Examiner asserted that “Jacobsen discloses a system including a patient monitor linked to a WLAN for the transmission of patient data.” *Id.*, pg. 3.

However, neither Maschke et al., Jacobsen et al, nor the combination thereof teaches or suggests a bidirectional monitor having a local wireless area network (WLAN) output of a communications interface to transmit care parameters as needed to the WLAN or an input device connected to the processor to allow a change in the care parameters by a health care provider.

Maschke et al. teaches data acquisition pods that “receive[] patient data from a plurality of sensors.” *Maschke et al., USP 6221012*, col. 11, lns. 45-46. Maschke et al. also teaches data acquisition cartridges, which “function[] similar to the pod” and “provide[] a separate 5000 volt isolation between the cartridge return circuit and the portable monitor.” *Id.*, col. 13, lns. 60-64. The pods and cartridges “transmit[] conditioned patient data . . . to a portable monitor,” which “receives and stores the conditioned data.” *Id.*, col. 2, lns. 48-62. Maschke et al. further teaches that the “portable monitor 102 is detachably coupled to a docking station 110 which may be positioned near the patient’s bed.” *Id.*, col. 4, lns. 53-55.

Maschke et al. further teaches the use of DMA channels 344a, 344b for communicating with the data acquisition modules. *See Id.*, col. 9, lns. 37-44. Maschke et

al. states that the DMA channels 344a and 344b “send commands and timing information to the [data acquisition modules], and receive data and status from them.” *Id.*

Jacobsen et al. also fails to teach or suggest a bidirectional monitor having a WLAN output of a communication interface to transmit care parameters as needed to the WLAN. Jacobsen et al. teaches monitoring vital signs “through a plurality of sensors that transmit their readings in the form of wireless communication to the receiver.” *Jacobsen et al., USP 6160478*, col. 7, lns. 21-25. Jacobsen et al. further teaches that “[t]he receiver 71 can then relay this information to the processing device 54 for a determination of whether the vital sign(s) are within normal parameters.” *Id.*, col. 7, lns. 25-27.

While Maschke et al. may teach a portable patient monitor that receives and stores conditioned data from a data acquisition pod or cartridge and receiving “commands and timing information” from DMA channels, Maschke et al. fails to teach or suggest a communication interface having an input to receive patient data from a communication medium and an output to transmit care parameters as needed to the communication medium. That is, Maschke et al. does not teach or suggest transmitting care parameters from the portable patient monitor back to the communication medium (i.e. lines 18 and 34 in Fig. 1B) from which patient data is received.

While Jacobsen et al. discloses transmitting sensor readings from a sensor to a receiver in the form of wireless communication, Jacobsen et al. fails to teach or suggest transmission of care parameters to the wireless communication between the sensor and receiver. That is, as stated above, Jacobsen et al. teaches a one-way wireless communication from a sensor to the receiver. There is no teaching or suggestion of a wireless communication from the receiver back to the sensor.

In the Advisory Action mailed August 15, 2006, the Examiner stated:

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Maschke was relied upon to disclose a bi-directional patient monitor, which allowed for data transfer via a communication system. Jacobsen has been relied upon to disclose the use of WLAN with patient monitors. It is the combination of references that has been relied upon to address the claim limitations.

*Advisory Action*, 08/15/2006, pg. 3. However, the combination of references fails to teach a bi-directional patient monitor as called for in claim 1. At best, the system that results from the combination of references suggests a wireless LAN communication medium between multiple data acquisition pods and a monitor/receiver. While this combination system may transmit data from the pods to the monitor over the wireless LAN and transmit commands and timing information to the pods, the combination system fails to transmit care parameters to the wireless LAN.

Furthermore, neither Maschke et al., Jacobsen et al, nor the combination thereof teaches or suggests an input device connected to the processor to allow a change in the care parameters by a health care provider, as called for in claim 1.

In the Advisory Action, the Examiner stated:

Maschke discloses an input device connected to the processor to allow a change in the care parameters by a health care provider. (col. 6, lines 34-41; col. 8, lines 20-43 memory cards are used to allow parameters entered/altered by healthcare provider, col. 11, lines 45-62) For example, Maschke explains that the memory cards can be used to input set up data (alarm limits).

*Advisory Action*, 08/15/2006, pg. 3. However, the care parameters transmitted as needed to the WLAN are not entered/altered by a healthcare provider via a memory card. As stated above, the combination system fails to transmit care parameters to the wireless LAN. As such, any care parameters that may be stored on a memory card are outside the scope of the subject matter of claim 1.

For at least these reasons, Appellant believes that the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness with respect to claim 1. Accordingly, Appellant believes that claim 1 is patentably distinct from the art of record. As such, claims 2-17 are also patentably distinct from the art of record at least pursuant to the chain of dependency.

**Claim 14:**

With respect to claim 14, the Examiner asserted that “Maschke teaches a portable patient monitor wherein the processor is programmed to receive patient reports and

diagnostic analyses prepared at other locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time,” as called for in claim 14. *Final Office Action*, 06/01/2006, pg. 5. Specifically, the Examiner cited column 12, lines 45 to column 13, lines 43 to support the proposition that the “processor receives sensor data.” *Id.* First, claim 14 calls for significantly more than the “processor receives sensor data.” Second, the cited section discusses positioning of various switches 13, 15, 42, and 44 as well as the inputs that are included in the input terminals of the various pod designs 150, 156, and 158. Nowhere does the cited section, or Maschke et al. as a whole, teach or suggest that “the processor is programmed to receive patient reports and diagnostic analyses prepared at other locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time,” as called for in claim 14. Furthermore, the combined system of Maschke et al. and Jacobsen et al. also fails to teach or suggest that called for in claim 14. For at least these reasons claim 14 is patentably distinct from the art of record.

**Claim 18:**

The Examiner rejected claim 18 stating that Maschke et al. teaches a mobile clinical information management system having “an input device to change the patient care parameters (col. 6, lines 34-41; col. 11, lines 45-62; col. 15, lines 36-43) . . .” *Id.*, pg. 6. Appellant respectfully disagrees.

Claim 18 calls for, in part, a portable patient monitor having a processor connected to a communication interface to receive and process patient data and to process and transmit care parameters. The portable patient monitor also has an input device to change the patient care parameters. That is, the input device changes the care parameters that the processor processes and transmits. As stated above, the Examiner, in the Advisory Action mailed Aug. 15, 2006, stated that memory cards are used to allow parameters entered/alterd by healthcare provider. Neither Maschke et al. nor the combination system of Maschke et al. and Jacobsen et al. teach or suggest that the memory card changes care parameters processed and transmitted by the processor. Maschke et al. states that “[t]ypically, memory card 106 will be used when transferring patient data between two different portable monitors 102.” *Maschke et al.*, ‘012, col. 8,



Ins. 26-28. However, transferring patient data between different monitors does not change the care parameters.

For at least these reasons, Appellant believes that the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness with respect to claim 18. Accordingly, Appellant believes that claim 18 is patentably distinct from the art of record. As such, claims 19-25 are also patentably distinct from the art of record at least pursuant to the chain of dependency.

While claims 19-25 are in condition for allowance at least pursuant to the chain of dependency, since claim 21 includes additional subject matter that is distinguishable from the art of record, at least some these additional distinctions will be addressed in detail.

#### **REJECTION OF CLAIM 8 UNDER 35 U.S.C. §103(a)**

The Examiner rejected claim 8 as being unpatentable over Maschke and Jacobsen, as applied to claim 1, and in further view of Fuchs et al. (USPN 5,788,646).

##### **Claim 8:**

Claim 8 calls for, in part, the processor to be programmed to allow alarm silencing of a bedside monitor and to admit and discharge patients. The Examiner stated that “Maschke discloses a patient monitor system that tracks information regarding patient admission and discharge (col. 8, lines 38-47).” *Final Office Action, 06/01/2006*, pg. 9.

Maschke et al. teaches that “[a]nother possible use of memory card 106 may be to associate a respective card with each patient from admission to checkout, providing rapid access to the patient's history at any time during his or her stay in the hospital.” *Maschke et al., '012*, col. 8, Ins. 38-41. Maschke et al. also teaches that “[w]hen used for this purpose, memory card 106 may remain in portable monitor 102 at all times between patient admission and discharge, except when the card is transferred between two portable monitors.” *Id.*, col. 8, Ins. 41-45. Therefore, Maschke et al. teaches that the memory card remains in the portable monitor between admission and discharge. There is no teaching or suggestion that the portable monitor of Maschke et al. has a processor programmed to admit and discharge patients.

For at least these reasons, Appellant believes that the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness with respect to claim 8. Accordingly, Appellant believes that claim 8 is patentably distinct from the art of record.

**REJECTION OF CLAIM 10 UNDER 35 U.S.C. §103(a)**

The Examiner rejected claim 8 “as being unpatentable over Maschke and Jacobsen, as applied to claim 1, in further view of and Ballantyne (USPN 5,867,821), and in further view of Gallant et al. (USPN 6,705,990-to substantiate Examiner's use of Official Notice).” *Id.*, pg. 10.

**Claim 10:**

The Examiner took Official Notice that VOIP was well-known in the art and, therefore, it would have been obvious to one of ordinary skill in the art to modify the patient monitor of Maschke et al. and Ballantyne et al. to permit VOIP. To substantiate the use of Official Notice, the Examiner provided Gallant et al. and stated that “[t]he Gallant reference further discloses that at the time of the disclosed invention, voice-over Internet protocol (VoIP) was a well-known method used to transmit (voice) data (col. 21, lines 24-29).” *Id.*, pg. 11. The Examiner then concluded that “[a]t the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the patient monitor of Maschke and Ballantyne in combination to permit VOIP transfer.” *Id.* The Examiner further asserted that “[o]ne would have been motivated include this feature to further facilitate the collection of patient information and enhance the quality of patient healthcare services. (Ballantyne: col. 2, lines 55-62).” *Id.*

While Gallant et al. does refer to VOIP as “well known” (*See col. 21, lns. 24-29*), Appellant disagrees that a generic statement of patient information collection facilitation and patient healthcare service quality enhancement taken from Ballantyne et al. provides a motivation to one skilled in the art such that it would be obvious to combine VOIP from Gallant et al. with Maschke et al. and Ballantyne et al. to produce the claimed invention. That is, Gallant et al. is not related to a mobile clinical patient monitoring system. Appellant believes that there is no motivation to include, use, or combine the art

to of record to meet the claimed invention having VOIP merely because VOIP was known and that the Examiner has not supplied any objective reason to combine VOIP with the prior art to meet the claimed invention absent hindsight.

For at least these reasons, Appellant believes that the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness with respect to claim 10. Accordingly, Appellant believes that claim 10 is patentably distinct from the art of record.

**REJECTION OF CLAIM 29 UNDER 35 U.S.C. §103(a)**

The Examiner rejected claim 29 “under 35 U.S.C. 103(a) as being unpatentable over Maschke and Jacobsen, and in further view of Fuchs et al (USPN 5,788,646).” *Id.*, pg. 17.

**Claim 29:**

Regarding claim 29, the Examiner stated that Maschke teaches a computer program wherein the computer program further causes the processor to relay patient admission and discharge information to the communications network. (col. 3, lines 21-44; col. 8, lines 27-47: patient data accessible after admission and before discharge)

Column 3, lines 21-44 of Maschke et al. are directed to an overview of pod, cartridge, and sensor communication and do not mention admission or discharge. Additionally, column 8, lines 27-44, while actually mentioning “admission” and “checkout”, fail to teach or suggest “the computer program further causes the processor to relay patient admission and discharge information to the WLAN,” as called for in claim 29. That is, the cited section states:

Typically, memory card 106 will be used when transferring patient data between two different portable monitors 102...[but] [a]nother possible use of memory card 106 may be to associate a respective card with each patient from admission to checkout, providing rapid access to the patient's history at any time during his or her stay in the hospital. When used for this purpose, memory card 106 may remain in portable monitor 102 at all times between patient admission and discharge, except when the card is transferred between two portable monitors. All patient trend data would be stored, in a particular memory card and continuously upgraded at appropriate intervals.

*Maschke et al.*, '012, col. 8, lns. 27-44.

Therefore, the cited section does not teach or suggest relaying admission and discharge information to the WLAN, as called for in claim 29. Rather, the section teaches that a memory card 106, not a WLAN, may be used to transfer patient histories, not admission and discharge information, during the patient stays. *Id.*

In the Advisory Action mailed Aug. 15, 2006, the Examiner stated:

Furthermore, it should be noted that the type of data transferred in system or method claim must affect the structure of a system component or must alter the manner and result of the given method. In the case of claim 29, the transfer of patient data across the communication system occurs, and the type of patient data does not impact how the method is performed. Therefore, these differences are found to be nonfunctional description material and are not functionally involved in the steps recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability. See *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

*Advisory Action, 08/15/2006*, pg. 3.

First, Appellant disagrees that patient data across the system occurs as called for in claim 29. With regard to claim 26, the Examiner stated that Maschke et al. discloses a processor to “remotely interface to a wireless communication system to acquire any patient alarms; (col. 3, lines 21-84 [sic]; col. 6, lines 59-64; col. 12, lines 30-38).” *Final Office Action, 06/01/2006*, pg. 18. Maschke et al. states that pod 150 includes a switch “coupled to a circuit which transmits a signal to monitor 102 causing monitor 102 to condition itself to start the cardiac output procedure (e.g., perform range and alarm limit adjustments).” *Maschke et al.*, '012, col. 12, lns. 34-38. If the communication network between pod 150 and monitor 102 is the WLAN remotely interfaced to acquire any patient alarms, then the art of record fails to teach or suggest that the processor relays patient admission and discharge information to the communication network between pod 150 and monitor 102. That is, neither Maschke et al. nor the combined system teaches or suggests relaying patient admission and discharge information to the wireless LAN.

The Examiner further stated that “Maschke disclose remotely interfaces to a communications system to acquire patient alarms (col. 6, lines 59-64; col. 12, lines 30-

38) and other patient data, including patient ID/name data (e.g. admission/discharge data)(col. 5, lines 10-29; col. 15, lines 15-35-during updating process).” *Advisory Action*, 08/15/2006, pg. 3. However, a monitor that acquires patient alarms and other patient data from a remote interface with a communications system does not teach or suggest the monitor relaying any information to the remote interface with the communications system.

Next, Appellant disagrees that a processor caused to relay patient admission and discharge information to the WLAN is nonfunctional description material and is not functionally involved in the steps recited, as the Examiner concluded. The Examiner stated that the type of data transferred in a method claim must alter the manner and result of the given method. Transferring admission and discharge information to the WLAN does alter the manner and result of the method. By transferring admission and discharge information to the WLAN, the processor causes admission and/or discharge of the patient.

For at least these reasons, Appellant believes that the Examiner has not satisfied the burden to establish a *prima facie* case of obviousness with respect to claim 29. Accordingly, Appellant believes that claim 29 is patentably distinct from the art of record.

**CONCLUSION**

In view of the above remarks, Appellant respectfully submits that the proffered rejections are unsupported. For at least the reasons articulated above, Appellant believes the claims define over the art of record.

**General Authorization for Extension of Time**

In accordance with 37 C.F.R. §1.136, Appellant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefor. The Office is authorized to charge Deposit Account No. 07-0845 for any fee deficiency.

As Appellant has previously paid for an appeal in the above-captioned matter, Appellant believes no fees are due for entry and consideration of this Appeal Brief.

Respectfully submitted,

/Timothy J. Ziolkowski/

Timothy J. Ziolkowski  
Registration No. 38,368  
Phone 262-376-5170  
tjz@zpspatents.com

Respectfully submitted,

/Kent L. Baker/

Kent L. Baker  
Registration No. 52,584  
Phone 262-376-5170  
klb@zpspatents.com

Dated: November 1, 2006  
Attorney Docket No.: GEMS8081.041

**P.O. ADDRESS:**  
Ziolkowski Patent Solutions Group, SC  
14135 North Cedarburg Rd.  
Mequon, WI 53097-1416  
262-376-5170

**APPENDIX OF CLAIMS ON APPEAL**

1. (Previously Presented) A wireless bi-directional portable patient monitor comprising:

a communication interface having a wireless local area network (WLAN) input to receive patient data from aWLAN within a medical care facility and a WLAN output to transmit care parameters as needed to the WLAN;

a processor connected to the communication interface to process the patient data and the care parameters;

a display connected to the processor to display the processed patient data in human discernable form; and

an input device connected to the processor to allow a change in the care parameters by a health care provider.

2. (Original) The portable patient monitor of claim 1 wherein the processor decodes the patient data to process and display the patient data and encodes the care parameters to transmit the care parameters to the WLAN.

3. (Original) The portable patient monitor of claim 1 wherein the portable patient monitor is a primary monitoring device.

4. (Original) The portable patient monitor of claim 1 wherein the processor processes the patient data to display ECG and vital sign data for a selected patient.

5. (Original) The portable patient monitor of claim 1 wherein the communication interface is compatible with an existing WLAN.

6. (Original) The portable patient monitor of claim 1 wherein the portable patient monitor is packaged within a housing that is transportable on a health care provider for extended periods.

7. (Original) The portable patient monitor of claim 6 having a length of approximately 7" (17.8 cm), a width of approximately 3.75" (9.5 cm), and a thickness of approximately 1.0" (2.54 cm).

8. (Original) The portable patient monitor of claim 1 wherein the processor is programmed to allow alarm silencing of a bedside monitor, and admit and discharge patients.

9. (Original) The portable patient monitor of claim 1 wherein the processor is programmed to allow adjustment of alarm parameter violation limits.

10. (Original) The portable patient monitor of claim 1 further comprising a speaker and microphone, and wherein the processor is programmed to process data to permit voice-over-internet protocol (IP) transfer.

11. (Original) The portable patient monitor of claim 1 further comprising a bar code scanning module and a bar code scanner, and wherein the processor is programmed to receive and compare patient data with data obtainable from a centralized database that includes pharmaceutical and patient bar codes to ensure dosage accuracy, and doctor orders.

12. (Original) The portable patient monitor of claim 1 wherein the processor is further programmed to interface with non-proprietary networked systems.

13. (Original) The portable patient monitor of claim 12 wherein the processor is further programmed to interface with infusion pumps and ventilators.

14. (Original) The portable patient monitor of claim 1 wherein the processor is further programmed to receive patient reports and diagnostic analyses prepared at other



locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time.

15. (Original) The portable patient monitor of claim 1 further comprising a PDA module to provide PDA functions to the health care providers.

16. (Previously Presented) The portable patient monitor of claim 15 wherein the PDA functions at least include a scheduler, reminders, and to-do lists.

17. (Original) The portable patient monitor of claim 1 further comprising a microphone and a digital audio recorder module to input a record of patient medical events by the health care provider.

18. (Original) A mobile clinical information management system to decentralize patient monitoring comprising:

- a portable patient monitor having a processor connected to a communication interface to receive and process patient data and to process and transmit care parameters, a display to display the patient data, and an input device to change the patient care parameters, the portable patient monitor having a configuration to allow wireless transport on a health care provider for extended periods;

- a plurality of bedside patient monitors to connect to a plurality of patients and transmit patient data;

- a WLAN coupled to the plurality of bedside patient monitors and the portable patient monitor.

19. (Original) The system of claim 18 further comprising a plurality of portable patient monitors, each portable patient monitor assigned to a given number of patients.

20. (Original) The system of claim 18 wherein the processor further:

decodes the patient data to process and display the patient data and encodes the care parameters to transmit the care parameters to the WLAN; and

processes the patient data to display ECG and vital sign data for a selected patient on the portable patient monitor.

21. (Original) The system of claim 18 wherein the portable patient monitor is a primary monitoring device and wherein a communication interface of the portable patient monitor is compatible with an existing WLAN.

22. (Original) The system of claim 18 wherein portable patient monitor has a length of approximately 7" (17.8 cm), a width of approximately 3.75" (9.5 cm), and a thickness of approximately 1.0" (2.54 cm).

23. (Original) The system of claim 18 further comprising a speaker and microphone, and wherein the processor is programmed to:

- allow alarm silencing of a bedside monitor;
- admit and discharge patients;
- adjust alarm parameter violation limits; and
- process data to permit voice-over-internet protocol (IP) transfer.

24. (Original) The system of claim 18 further comprising:  
a bar code scanning module and a bar code scanner and wherein the processor is programmed to receive patient data encoded in a patient wristband, and to compare patient data with data obtainable from pharmaceutical bar codes and a centralized database to check dosage accuracy and compliance with doctor orders;

wherein the processor is further programmed to interface with infusion pumps and ventilators, and to receive patient reports and diagnostic analyses prepared at remote locations in the medical care facility to provide the health care provider with the patient reports and diagnostic analyses in real time.

25. (Original) The system of claim 18 wherein the portable patient monitor includes a PDA module having PDA functions that include a scheduler, reminders, and to-do lists, and further comprises a microphone and a digital audio recorder module to record an audio input by the health care provider into the microphone and record patient medical events.

26. (Original) A computer program residing in memory of a portable patient monitor to cause a processor to:

remotely interface to a WLAN to acquire any patient alarms;

sound an alarm if a patient alarm occurs;

allow user silencing of the alarm at the portable patient monitor and at a bedside monitor; and

display patient data.

27. (Original) The computer program of claim 26 wherein the computer program further causes the processor to:

periodically check a recharged battery charge; and

display a warning if the rechargeable battery charge is low.

28. (Original) The computer program of claim 26 wherein the computer program further causes the processor to allow user adjustment of alarm parameter violation limits.

29. (Original) The computer program of claim 26 wherein the computer program further causes the processor to relay patient admission and discharge information to the WLAN.

30. (Original) The computer program of claim 26 wherein the computer program further causes the processor to process audio data from a health care provider to record medical history of a patient.

31. (Original) The computer program of claim 26 wherein the computer program further causes the processor to scan a bar code from a patient ID and compare data obtained therefrom with data on the patient from a main patient database to ensure proper medical treatment.

**EVIDENCE APPENDIX**

--None.

**RELATED PROCEEDINGS APPENDIX**

--None.